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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER NGUYEN, PHU K				
ART UNIT		PAPER NUMBER		
2671				

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/496,137

Applicant(s)

SCHKOLNE ET AL.

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 is/are allowed.
- 6) ☒ Claim(s) 1,4,8-17 and 21-30 is/are rejected.
- 7) ☒ Claim(s) 2-3, 5-7, and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4, 8-17, and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over DANIELS et al. (6,268,865) in view of IWAMURA (6,501,515).

As per claim 1, and 15, Daniels teaches the claimed "method for producing a shape" comprising:

Tracking a user's hand (Daniels, column 27, lines 24-40); and

Forming a 3D modeled surface by adding shapes defined by hand movements at each of a plurality of intervals (Daniels, figure 1).

Iwamura teaches the virtual reality environment in which positions of a user's hand are track (Iwamura, column 4, line 49 to column 5, line 52). It would have been obvious at the time the invention was made, in view of the teaching of Iwamura, to

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configure Daniels' method as claimed because the input signal generated by hand-movement input device can be generated by any well known input device such as a hand tracking in a virtual reality environment.

Claim 4 adds into claim 1 "taking a mesh sample, to change it and add to a new sample" which would have been obvious because the input signal from the monitor of hand's gesture can be used to define to any graphical manipulation such as editing the object.

Claim 8, and claims 22-23, adds into claim 1 "defining a first and second hand positions as a starting and stopping positions, respectively" which Daniels teaches in the hand stroke (fig. 1).

Claim 9 adds into claim 1 "an eraser tool" which would have been obvious because the input signal received from the input device can be applied as drawing or eraser stroke.

Claim 10 adds into claim 1 "a plurality of props" which would have been obvious because the input signal can be used to manipulate any graphic tool such as props.

Claim 11 adds into claim 10 that the props are tongs which would have been obvious because the tongs are a widely graphical device to manipulate the object.

Claim 12 adds into claim 10 that the props are spherical ball which would have been obvious because the spherical balls are a widely graphical device to manipulate the object.

Claim 13 adds into claim 10 that the props are sponges to alter the object which would have been obvious because the sponges are a widely graphical device to manipulate the object.

Claim 14 adds into claim 12 that the altering is smoothing which would have been obvious because the smoothing is a widely used graphical manipulation.

Claim 16 adds into claim 15 "create 3d-strokes of shape" which Daniels teaches in figure 1.

Claim 17 adds into claim 16 "using the bend of the hand to define the curvature of 3D-strokes" which would have obvious because the input signal from the monitor of hand's gesture can be used to define to any graphical manipulation such as the curvature.

Claim 21 adds into claim 16 "use hand postures to switch between different modes" which would have been obvious because the input signal from the monitor of hand's gesture can be used to define to any graphical manipulation such as "switching modes".

Claim 24 adds into claim 16 "displaying different tools based on different postures" which would have obvious because the input signal from the monitor of hand's gesture can be used to define to any graphical tools.

Claim 25 adds into claim 16 "using the finger to draw a narrower stroke" which would have obvious because the input signal from the monitor of hand's gesture can be used to define to any graphical manipulation such as the narrower stroke.

Claim 26 claim a drawing device based on the system of claim 1, therefore, it is rejected under the same reason.

Claims 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over DANIELS et al. (6,268,865) .

As per claim 27, Daniels teaches the claimed "shape drawing system" comprising:

"a user interface which operates to command shapes to be created" (Daniels, figure 1). It would have been obvious to use Daniel's input device (figure 29) to add the surface region to an extent surface because Daniels' graphical object creator can be use to create the object and add it the existing objects.

Claim 29 claims a method based on the system of claim 27 and adds the step of deforming the object which would have been obvious because Daniels image manipulator can be used to applied any well known image manipulations such as a deformation operation.

Claims 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over DANIELS et al. (6,268,865) in view of IWAMURA (6,501,515).

Claim 28 adds into claim 27 "hand movement tracking" which Iwamura teaches in column 4, line 49 to column 5, line 52. It would have been obvious at the time the invention was made, in view of the teaching of Iwamura, to configure Daniels' method as claimed because the input signal generated by hand-movement input device can be generated by any well known input device such as a hand tracking in a virtual reality environment.

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Claim 30 claim a method based on the system of claim 28, therefore, it is rejected under a similar reason.

Claim 31 is allowed.

Claims 2-3, 5-7, 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (703)305 - 9796. The examiner can normally be reached on M-F 8:00-4:30.

The fax phone number for the organization where this application or proceeding is assigned is (703)308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3800.

Phu K. Nguyen
December 14, 2003


